

The Role of Mutual Funds in Corporate Governance: Evidence from Mutual Funds' Proxy Voting and Trading Behavior

Ying Duan^{*}

University of Alberta

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Abstract

When mutual funds are dissatisfied with the management of firms in their portfolios, they can either exit by selling all their shares or attempt to directly influence corporate decisions by voting against management at shareholder meetings. I examine a new dataset that covers the 100 largest mutual fund families' proxy voting records on a series of corporate governance-related proposals from July 2003 to June 2006. Although both exit and voting are important governance mechanisms, I find that mutual funds are more likely to vote against management rather than exit when management's recommendations on proposals conflict with those of an independent proxy research firm (ISS). I show that the decision to vote against management rather than exit is related to fund and portfolio firm characteristics; in particular, funds are more likely to vote against management in the case of poorly governed firms. I also show that mutual funds' trading behavior and voting behavior are related. Mutual funds are more likely to buy high-growth firms before they oppose management.

Keywords: mutual funds, proxy voting, trading, governance

JEL Classifications: G23, G34

^{*} Assistant Professor of Finance, 4-20K Business Building, School of Business, University of Alberta, Edmonton, Alberta, Canada, T6G 2R6. Telephone: (780) 248-1395, Fax: (780) 492-3325, E-mail: Ying.Duan@ualberta.ca. I would like to thank my dissertation committee chair Edie Hotchkiss for continuous guidance and valuable discussions. I give special thanks to my dissertation committee members Roger M. Edelen, Jun Qian, and Hassan Tehranian for their comments and encouragement. The helpful comments of Alex Edmans, Richard Evans, Olubunmi Faleye, Cliff Holderness, Gang Hu, David McLean, Jeff Pontiff, Laura T. Starks, Phil Strahan, Xuan Tian, Aimei Zhong, and seminar/session participants at Boston College, as well as the 2007 FMA Doctoral Student Seminar, are gratefully acknowledged. All remaining errors are my own.

1. Introduction

As of December 2006, mutual funds as a whole are among the largest investors in U.S. corporate stock, holding 23% of the outstanding shares of U.S. companies.¹ Whether and how mutual funds are actively involved in corporate governance remains an open question. When mutual funds are dissatisfied with firm management, they can either follow the “Wall Street rule” by selling all their shares (exiting), or they can attempt to directly influence corporate decisions by voting against management at annual or special meetings. In this paper, I examine the relationship between mutual funds’ trading and voting behavior.

In recent years, anecdotal evidence has supported the idea that certain mutual funds have become more active in exercising their proxy voting responsibilities.² Since July 2003, the U.S. Securities and Exchange Commission (SEC) has required mutual funds to disclose how they vote proxies with respect to portfolio securities. A few recent studies have explored this voting behavior directly,³ focusing on how potential conflicts of interests and other mutual fund or portfolio firm characteristics affect fund voting behavior. This literature, however, does not consider funds’ choice of whether to exit or to cast their votes. Exit is also an important governance mechanism, because selling shares can depress a company’s stock price and hence indirectly impact management’s decisions.⁴ Therefore, it is important to consider mutual funds’ trading and voting behavior simultaneously so that we can fully understand the role of mutual funds in corporate governance.

The current literature usually measures effective monitoring behavior by whether or not a mutual fund votes against a proposal or by whether or not a mutual fund votes against

¹ Source: *2007 Investment Company Fact Book* by the Investment Company Institute.

² For example, “Some Mutual Funds are Joining the Activist Bandwagon,” 15 January 2006, *New York Times*.

³ For example, Davis and Kim (2006), Matvos and Ostrovsky (2006), Ashraf and Jayaraman (2007).

⁴ Admati and Pfleiderer (2006), Edmans (2006), and Edmans and Manso (2007).

management.⁵ Neither metric, however, is necessarily a useful indicator. For Example, management may oppose certain shareholder proposals, such as linking pay to social issues, where it is less obvious that such proposals will increase shareholder value. Voting against management in these cases does not clearly benefit shareholders.

In my analysis, I attempt to identify cases where voting against management is most likely to create shareholder value. Specifically, I identify instances in which management's recommendation for a vote conflicts with that of an outside leading independent proxy research and institutional shareholder voting services firm (Institutional Shareholder Services, or ISS). Empirically, if mutual funds are active in corporate governance, they should be more likely to vote against management in these cases, which I refer to hereafter as "oppose management" proposals. Alternatively, following the "Wall Street rule," funds should exit in these cases.

Institutional Shareholder Services' Voting Analytics database provides voting recommendations for every proposal for Russell 3000 Index companies. I assume that ISS, as an independent service, makes recommendations intended to maximize shareholders' value.⁶ I find that instead of holding shares and supporting management, mutual funds are more likely to exit or vote against management for the "oppose management" proposals. Although both the voting and exit mechanisms appear important, I find that funds are more likely to vote against management rather than exit for these proposals.

I further examine how fund trading and voting decisions vary with important fund and portfolio firm characteristics. Short-horizon mutual funds with relatively high portfolio turnover rates may be more concerned with short-term returns than with improvements in value that firms with stronger corporate governance may realize. Moreover, mutual funds must preserve liquidity to meet investors' redemption requests, which may dilute their incentives to monitor management and influence policies through proxy voting. Thus, I would expect funds with

⁵ Chou, Ng, and Wang (2007) are an exception.

⁶ Alexander et al. (2006) find that ISS recommendations do convey information about the relative or absolute merits of proxy proposals.

higher turnover rates, or that have held their stake for a shorter time, to be more likely to sell their shares in cases where a management-supported proposal is less clearly in shareholder's interests. Further, Ye (2006) argues that mutual funds with large ownership are more likely to compromise with management in proxy voting because they would like to influence management privately. A large ownership stake may also reflect a greater likelihood of a conflict of interest; consistent with this idea, Davis and Kim (2006) find that mutual funds with conflicts of interest (based on management of pension assets) more often vote with management in general. On the other hand, mutual funds have more incentive and power to oppose management in firms in which they have a larger stake.

Empirically, I find that funds with higher turnover rates are more likely to sell their shares, but this appears independent of whether the proposal is one for which they should oppose management. However, long-horizon funds (defined as funds holding a firm for at least one year) are less likely to exit or to vote against management when they should oppose management according to ISS recommendations. A large stake held by individual mutual fund is associated with a higher probability of voting against management. However, a large stake held by the whole mutual fund family is associated with a lower probability of voting against management. The results related to the large stake may reflect that conflicts of interest are more serious at the level of mutual fund family rather than the individual mutual fund⁷.

Kahn and Winton (1998) theoretically examine how firm characteristics affect institutions' choice of exit versus monitoring, where monitoring refers to direct intervention by the investor.⁸ They argue that monitoring is strongest for poorly performing firms because of the high potential for performance improvement. Moreover, monitoring is most likely in situations easily understood by outsiders, such as for mature or low-technology industries or for firms with general "agency" problems, because institutions are more likely to successfully monitor management in

⁷ Davis and Kim (2006) study conflicts of interest in the level of mutual fund family.

⁸ Following Kahn and Winton, in this paper I consider monitoring to mean direct intervention, i.e. voting against management.

these situations. Empirically, I find that mutual funds are more likely to sell poorly governed firms (as measured by the Gompers, Ishii, and Metrick (GIM) index) in regular situation (defined as when management recommendations are consistent with those of ISS). However, consistent with Kahn and Winton (1998), when management recommendations conflict with those of ISS, mutual funds choose to vote against management of poorly governed firms.

Lastly, I consider the impact of a portfolio firm's stock liquidity on funds' decisions to vote versus exit. Maug (1998) and Edmans (2006) theoretically predict that liquid stock markets encourage selling rather than intervention. Consistent with their prediction, my results show that mutual funds are more likely to exit rather than to vote with or against management for liquid stocks.

I next examine how mutual funds' trading behavior before the vote relates to their voting behavior. Mutual funds could buy more shares before the voting if they expect trading profits when they oppose management or they could buy shares to attempt to influence the voting outcome. Kahn and Winton (1998) argue that potential trading profits are greatest when barriers to gathering information are highest, such as for younger, smaller, or less well-known firms. On the other hand, it is harder for mutual funds to successfully affect management decisions in these firms and therefore unclear how these firm characteristics relate to funds' trading. Because only shareholders owning shares of the company on the record date (preceding the meeting) are entitled to vote at the subsequent meeting, I examine this question by looking at the relationship between voting and trading before the record date. I find that mutual funds' trading behavior before the record date is related to their subsequent voting behavior. Mutual funds are more likely to buy stock in younger, growth firms (low book-to-market ratios) before the vote when they vote against management in these firms.

Finally, I examine how trading and voting are related subsequent to the voting outcome. Mutual funds may reduce their ownership if the voting outcome is not consistent with their vote, especially when they are dissatisfied with management. Focusing on the "oppose management"

proposals (where management recommendations conflict with those of ISS), I expect that mutual funds are more likely to reduce their holdings if they oppose management but the voting outcome is in favor of management. However, I find limited results to support this argument.

The rest of the paper proceeds as follows. I review the related literature in Section 2. Section 3 describes the sample and variables in my empirical analysis. In Section 4, I examine mutual funds' choice between selling their shares or casting their votes, as well as the relationship between mutual funds' trading and voting behavior. Section 5 concludes.

2. Related Literature

This paper is related to the literature on how institutional shareholders, in particular mutual funds, choose either to exert monitoring effort to influence corporate decisions or simply to sell their shares. Sheleifer and Vishny (1986), Maug (1998), and Kahn and Winton (1998) theoretically study how liquidity and other firm characteristics affect institutions' choices. Admati and Pfleiderer (2006), and Edmans (2006) argue that institutions can use exit as a threat to influence management. Edmans and Manso (2007) theoretically analyze both exit and direct intervention to rationalize the multiple blockholder structures observed in reality. Gopalan (2005) presents a model and some empirical evidence showing that large shareholder trading can affect corporate governance by increasing the subsequent takeover probability. These theories state the importance of institutions' choice of exerting monitoring effort vs. exit and shed light on my empirical work in this paper.

Empirical evidence indicates that some institutions are active in monitoring management. Black (1998), Gillan and Starks (1998), Romano (2000), and Karpoff (2001) summarize the literature on shareholder activism and corporate governance. Gaspar, Massa and Matos (2005) and Chen, Hartford, and Li (2006) use the CDA/Spectrum institutional holding database and find only long term institutional investors monitor firms' M&A activities. On the other hand, Parrino,

Sias, and Starks (2003) find ownership decline in the year prior to forced CEO turnover, suggesting that institutions choose to sell their shares when they are dissatisfied with management.

Brickley, Lease, and Smith (1988), Gordon and Pound (1993), and Gillan and Starks (2000) study the voting on antitakeover amendments and shareholder proposals. They find a positive relationship between aggregate votes of proposals and the outside block shareholder ownership.

Instead of using 13f data or aggregate votes, this paper uses mutual funds' proxy voting records for each proposal, which directly measure mutual funds' monitoring effects in proxy voting. A few recent papers also use mutual funds' voting records to study mutual funds' voting behavior. Davis and Kim (2006) and Matvos and Ostrovsky (2006a) find that mutual funds' conflicts of interests affect their voting behavior in governance-related proposals and in M&A activities. Ye (2006), Ashraf and Jayaraman (2007), Chou, Ng, and Wang (2007), Das (2007), and Ng, Wang, and Zaiats (2007) study how mutual funds' voting behavior varies with different firm and fund characteristics.

Ashraf and Jayaman (2007) and Chou, Ng, and Wang (2007) are two studies closely related to this paper. Ashraf and Jayaman (2007) examine mutual funds' trading behavior after the release of voting records. They find that funds that support shareholder proposals reduce holdings after the release of voting records. Since the time of releasing voting records could be very far from the shareholder meeting date, mutual funds' trading behavior after the release of voting records may be unrelated to the votes cast in the meeting. Unlike their paper, I focus on mutual funds' choice of voting versus exit and examine mutual funds' trading behavior around the meeting date. Like my study, Chou, Ng, and Wang (2007) also divide proposals into groups based on whether management's recommendations conflict with those of ISS. They examine a different question, however—the relationship of mutual fund governance and funds' voting behavior.

This paper contributes to the literature by examining the relationship between mutual funds'

trading and voting behavior, which other studies have ignored. Because exit and voting against management are both important mechanisms for mutual funds to be involved in corporate governance, this paper helps us further understand the role of mutual funds in corporate governance. While the literature usually examines either mutual funds' voting behavior or their trading behavior, it provides instructions for this paper to focus on certain important firm and fund characteristics that may affect mutual funds' choice of voting vs. exit.

3. Data and Variables

3.1 Voting Data

Mutual funds' voting records are obtained from the Institutional Shareholder Services (ISS) Voting Analytics database. Since 2003, the SEC has required mutual funds that invest in voting securities to disclose in their statements of additional information ("SAIs") the policies and procedures that they use to determine how to vote proxies relating to securities held in their portfolios. The voting policies and procedures include information about whether mutual funds vote at fund level or at fund family level, and information about whether mutual funds use a third party as a consultant in the proxy voting. The SEC has also required mutual funds to disclose proxy voting records in every proposal at any annual or special meetings annually on Form N-PX. The N-PX form discloses information including the portfolio company name, record date, meeting date, proposal, management voting recommendation, and the votes cast by the mutual fund. Each year, the N-PX form is reported no later than August 31, and covers all votes cast from July 1 of the previous year to June 30. The ISS database collects N-PX information covering three years of voting records for the top 100 mutual fund families from July 2003 to June 2006. During the same time period, the ISS also reports detailed voting outcome information and ISS voting recommendation for every proposal in Russell 3000 companies.

In this study, I focus on governance-related proposals, grouping them into 16 major proposal

types.⁹ For each proposal in my sample, I compare the ISS voting recommendation with management's recommendation. I create a dummy variable that equals 1 if a proposal is an "oppose management" proposal, where management's recommendation conflicts with that of ISS, and 0 otherwise.

I require mutual funds in the voting data to have fund return, certain other fund characteristics, and ownership data from the CRSP Mutual Fund Database. I limit mutual funds to be equity funds only, defined in this study as investing at least 90% of mutual funds assets in common stocks. I also require portfolio firms in the voting data to have available information from the Center for Research in Securities Prices (CRSP) and the CRSP/Compustat merged database, executive ownership data from the Compustat Executive Compensation database, and Gompers, Ishii, and Metrick (2003) (GIM) governance scores from IRRC.

3.2 Sample Overview

My final sample includes approximately 30,000 fund firm proposals. It covers 72 mutual fund families, 769 mutual funds, and 308 portfolio firms. On average, mutual funds hold 0.13% of portfolio firms, and mutual fund families hold 0.45% of portfolio firms, measured at the effective holding date just before the record date. Even though mutual funds' ownership on average is small, mutual funds' and fund families' ownership could be as high as 9.9% and 11.3%, respectively, in my sample. The total net assets of mutual funds in the sample on average accounts for 16% of the total mutual fund industry, measured at June 30 from 2004 to 2006.

Table 1 provides details of each proposal type in the sample. It includes 701 firm-proposals. Only 13% of them are management proposals, and management opposes almost all shareholder proposals. Although management supports only 13% of the proposals, ISS supports 73% of them. However, ISS does not always support management proposals or support shareholder proposals. For example, among 144 shareholder proposals that require restricting executive

⁹ Follow the classification of the Annual Corporate Governance Review (2005) by Georgeson Shareholder.

compensation, ISS supports only 16% of them. On the other hand, ISS support all the proposals that require repealing classified board, 43% of which are sponsored by management. This indicates that ISS recommendation conveys some information about how good or bad a proposal is, because ISS makes recommendation based on the proposal itself, not on the sponsor. Finally, 60% of the proposals have inconsistent ISS and management recommendations.

Table 2 provides descriptive statistics for the sample firms and sample funds. It reports the mean and median of certain firm and fund characteristics, which are measured in the month of the record date.

In my sample, a typical mutual fund has a turnover rate of 0.88 and an abnormal return close to zero (-0.05%). All the fund characteristics in my analysis are measured at the fund portfolio level. Mutual funds turnover rates and expense ratios are from the CRSP Mutual Fund Quarterly Database. Mutual funds return and total net assets are from the CRSP Mutual Fund Monthly Database. The CRSP Mutual Fund Database reports information at the fund share class level. Since several share classes often belong to the same portfolio and have the same ownership information and voting records, I aggregate fund characteristics into the fund portfolio level. To do this, I compute the weighted average of fund characteristics, such as expense ratio, of all share classes in the same portfolio (weighted by total net assets). Mutual fund abnormal return is computed by subtracting weighted-average return of all fund share classes with the same Standard & Poor's detailed objective code from mutual fund return.

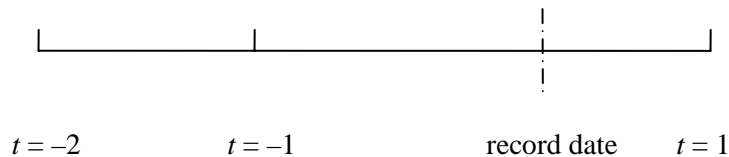
Portfolio firms in my sample are big firms with average market value of \$26.19 billion. Institutions on average hold 70.04% of portfolio firms. Portfolio firm size, return, shares outstanding, trading volume, and price are from the CRSP monthly database. Portfolio firm book value is data59 obtained from the CRSP/COMPUSTAT quarterly merged database. I compute a market value weighted average return of all firms with the same three-digit SIC codes as a benchmark return, and subtract it from firm monthly return to obtain firm abnormal monthly return. Executive ownership is obtained from the Compustat Executive Compensation database,

which collects up to nine executives for a given year. I sum up the ownership of all executives available and compute the percentage of company's shares owned by executive officers as insider ownership. Institutional ownership is obtained from CDA/Spectrum 13f filings. Amihud's (2002) illiquidity measure is computed monthly by dividing the absolute value of firm's return by the dollar trading volume.

4. Results

4.1 Mutual Funds' Choice of Exit vs. Casting Their Votes

Mutual funds that own shares of the company on the record date are entitled to vote at the subsequent meeting. When management's recommendations conflict with those of ISS ("oppose management" proposals), mutual funds may vote against management, or they may walk away by selling all shares before the record date.



The above time line reflects the relationship between the record date and the dates with valid security holding information of mutual funds. Time -2 , -1 , and 1 are the samples of dates with valid security holding information of mutual funds. Mutual fund ownership data are from the CRSP Mutual Fund Database. Time -1 is the holding date just before the record date, and time 1 is the holding date just after the record date. I require the time between -1 and the record date to be no more than 90 days.

I first consider the group of mutual funds that own shares at date $t = -1$. I divide these funds into three groups according to their voting records for each portfolio firm. Group 1 includes funds that have voting records and vote with management. Group 2 includes funds holding a

stock at time -1 but with no voting records for that stock, meaning that these funds chose to exit before the record date. Group 3 includes funds that have voting records and vote against management. I constructed the “mutual fund choice” variable that equals 0 if a mutual fund votes in favor of management, equals 1 if it exits, and equals 2 if it votes against management.

Panel A of Table 3 reports the distribution of these three groups for the “oppose management” proposals versus other proposals. Almost half (47.84%) of the funds vote against management for the “oppose management” proposals, and only 3.14% of the funds vote against management for other proposals. The difference is statistically significant. However, there is no difference in the percentage of funds that exit. This finding suggests that mutual funds are actively involved in corporate governance by voting against management when they should.

Next, I use a multinomial logistic model to regress the “mutual fund choice” variable on the “oppose management” proposal dummy variable and other explanatory variables, including stock transaction costs, fund characteristics, fund family characteristics, and firm characteristics, for all the proposals. All other explanatory variables are measured at time -1 . In the regression, I use either mutual funds that vote with management or funds that exit as the base group. Panel B of Table 3 reports both regression results. In Panel B, I use long term shareholder dummy variable to measure fund investment horizon. Following Chen, Harford and Li (2006), I define funds as long term shareholders if they hold shares for at least one year before time -1 . I also use an index fund dummy variable and fund turnover rate as proxies of fund investment horizon and obtain similar results (not reported).

My key variable is the “oppose management” proposal dummy variable. In the regression that uses mutual funds that vote with management as the base group, the coefficients on the “oppose management” proposal dummy variable for mutual funds that exit and funds that vote against management are both positive and statistically significant at 1% level. This result means mutual funds are more likely to exit or vote against management than to vote with management when management recommendations conflict with those of ISS. Mutual funds increase their

probability of voting against management by 47.20% and increase their probability of exit by 2.92% if a proposal is an “oppose management” proposal. Moreover, in the regression using mutual funds that exit as base group, the coefficient on the “oppose management” proposal dummy variable for mutual funds that vote against management is positive and statistically significant at the 1% level, which means mutual funds are more likely to vote against management rather than exit for the “oppose management” proposals. My results provide evidence that although both exit and voting are important mechanisms for mutual funds to be involved in corporate governance, mutual funds are more likely to influence management directly through voting rather than to exit when they should oppose management.

Because both exit and voting are important governance mechanisms, I next examine how fund and firm characteristics affect mutual funds’ choice of voting versus exit when they should oppose management. I analyze mutual funds’ choices for “oppose management” proposals and other proposals separately. Other proposals represent the regular situation, while “oppose management” proposals represent the situation where mutual funds should oppose management. By comparing the results of these two types of proposals, I can analyze how mutual funds behave differently from regular situation when they should oppose management. Also, I can distinguish whether mutual funds’ choices come from the fact that mutual funds care about corporate governance when they should or whether mutual funds’ choices are independent of whether the proposal is one for which they should oppose management.

Focusing on the “oppose management” proposals first, I use multinomial regression to regress the “mutual fund choice” variable on fund and firm characteristics. All explanatory variables are measured at time -1 . I use either mutual funds that vote with management or funds that exit as the base group in the regression. Panel A and Panel B of Table 4 reports the regression results. In Panel A, I use long shareholder dummy variable to measure fund investment horizon. In Panel B, I use fund turnover rate to measure fund investment horizon. I also use an index fund dummy variable as a proxy for fund investment horizon and obtain similar results as

in Panel B (not reported). I redo the analysis in Panel A and B of Table 4 for other proposals. Results are reported in Panel C and D of Table 4.

In Panel C of Table 4, in the regression that uses mutual funds that exit as the base group, the coefficients on the long term shareholder dummy variable for mutual funds that vote against management or vote with management are both positive and statistically significant. This means in regular situation long term mutual fund shareholders are less likely to exit a firm. I find similar result in the regression that uses mutual funds that exit as the base group in Panel A of Table 4. However, different from Panel C of Table 4, in the regression that uses mutual funds that vote with management as the base group in Panel A of Table 4, the coefficient on the long-term shareholder dummy variable for mutual funds that vote against management is negative and statistically significant. This shows that mutual funds with long investment horizon are less likely to exit or to vote against management when they should oppose management. The possible explanation is that long horizon funds may have conflicts of interests so that they are more likely to support management. However, in Panel B of Table 4, I find that funds with higher turnover rates are more likely to sell their shares. Since Panel D of Table 4 shows similar result for high turnover funds, it seems that this result is independent of whether the proposal is one for which they should oppose management.

Since Panel A and C versus Panel B and D of Table 4 present similar results for all the other variables except for the variable to measure fund investment horizon, I use Panel A and C to explain the regression results for all the other variables. Different from Panel C of Table 4, in Panel A of Table 4, in the regression that uses mutual funds that sell exit as the base group, the coefficient on mutual fund ownership (measured as the percentage of shares held) for mutual funds that oppose management is positive and statistically significant, which means mutual funds with large stakes are more likely to vote against management rather than exit when they should oppose management. This result supports the theory that large shareholders have more incentives to monitor. However, in Panel A of Table 4, the coefficients on mutual fund family

ownership (measured as the percentage of shares held) indicate that mutual funds are less likely to either exit or oppose management in firms in which their families have a large stake. This means mutual funds with large stake in family level are not actively involved in corporate governance in both exit and voting. The argument of conflicts of interests could explain this result. Further study is needed to test this explanation.

I use a firm's past 12 months' average abnormal return to measure firm performance, and I use the GIM index to measure firm governance. The results in Panel C of Table 4 show that regularly mutual funds are more likely to sell poorly governed firms measured by GIM index. However, in Panel A of Table 4, I do not find similar results. Instead, I find that mutual funds are more likely to vote against management rather than support management in poorly governed firms. I do not find evidence that firm performance affects mutual funds' decisions.

Moreover, the coefficients on the percentage of shares held by other institutions indicate that mutual funds are less likely to vote against management rather than exit or support management in firms in which other institutions hold a large stake. Other institutions refer to all the institutions other than the fund family. In this situation, mutual funds behave like "free riders". Similarly, I find that mutual funds are more likely to exit firms with higher insider ownership for "oppose management" proposals, while they are less likely to sell those firms in regular situation.

I use two liquidity measures: the average dollar trading volume and the Amihud illiquidity measure. The higher the dollar trading volume is, the more liquid the stock is. The lower the Amihud illiquidity measure is, the more liquid the stock is. Both variables show that mutual funds tend to sell more-liquid stocks rather than vote with or against management. This evidence is consistent with the idea that liquid markets can encourage firms to follow the "Wall Street rule."

Compare Panel A with Panel C in Table 4, I find that mutual funds are less likely to sell big firms and more likely to vote against management in value firms (measured by book to market ratio). These results are independent of whether the proposal is one for which they should

oppose management.

In my sample, 27% of the funds always follow ISS recommendations. They are in smaller families and have higher turnover rate than other funds. If funds always follow ISS recommendations, they will oppose management for “oppose management” proposals, which does not mean they are active in corporate governance through voting. I redo the analysis in Table 3 and Table 4 by excluding funds which always follow ISS recommendations and get similar results (not reported), which implies my results are not driven by funds which always follow ISS recommendations.

If mutual funds care about corporate governance, they will pay more attention to those proposals with close voting outcomes, which means the percentage of shares supporting the proposal is close to the voting requirement to pass the proposal. Specifically, in this paper, I calculate the difference of voting outcome and voting requirement as $(\text{percentage of shares supporting the proposal} - \text{voting requirement}) / \text{voting requirement}$. I sort the absolute value of the difference and define the lowest 25 percentile as the proposals with close voting outcomes. In Table 5, I redo the analysis in Panel A and B of Table 4 focusing on the proposals with close voting outcomes. Both Panel A and B in Table 5 present similar results except for the variables for fund investment horizons. Generally, Table 5 provides stronger results than Table 4. Especially, for the proposals with close voting outcomes, mutual funds with large stakes show higher probability to vote against management than both to exit and to vote with management. This means mutual funds with large stakes are more active in corporate governance when their votes have more impact on the voting outcomes, such as in the proposals with close voting outcomes.

4.2 Mutual Funds' Trading before the Record Date

Mutual funds could buy more shares before the voting to gain trading profits from opposing management or to influence voting outcome, especially when they are dissatisfied with

management. In this section, I examine how mutual funds' trading behavior is related to their voting behavior before the record date. I require the time between -1 and the record date to be no more than 90 days. I consider all the funds with voting records.

I consider two trading measures. The first measure is a dummy variable indicating whether a fund increases its security holdings or initiates a new position during the quarter or six months prior to time -1 , and equals 0 otherwise. The second measure is the change in the percentage of share held by the mutual fund during the quarter, or six months prior to time -1 .

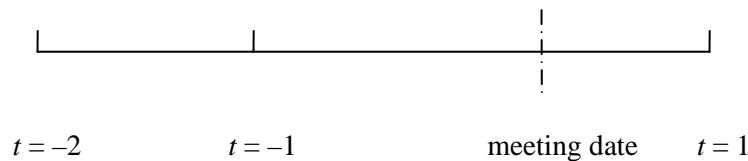
Focusing on the "oppose management" proposals, I use a probit model to regress the first trading measure on the fund vote cast, fund and firm characteristics and the interactions between the fund vote cast and certain firm characteristics. All the fund and firm variables are measured at time -1 . The fund vote cast equals 1 if a fund votes against management, and equals 0 if it votes in favor of management. Panel A of Table 6 reports the regression results for the trading in the quarter and six months prior to time -1 . Panel B Table 6 reports the regression results using the second trading measures.

In panel A of Table 6, my key variables are the fund vote cast and the interactions between the fund vote cast and firm characteristics. Kahn and Winton (1998) argue that trading profits is greatest in magnitude when barriers to gathering information are highest, such as younger, smaller, or less well-known firms. On the other hand, it is harder for mutual funds to successfully affect management decisions in those firms. Whether mutual funds tend to buy more shares in those firms is an empirical question. The coefficient on the fund vote cast is not statistically significant, which means generally mutual funds do not buy more shares when they oppose management for proposals where management recommendations conflict with those of ISS. Out of all the interaction variables, only the interaction between the fund vote cast and the book-to-market ratio in the quarterly change regression is negatively significant at 10% level. This result suggests that mutual funds are more likely to buy shares in firms with low book-to-market ratios before the record date when they oppose management.

I do not find similar results in Panel B of Table 6, which means the size of shares increased is not related to the fund voting.

4.3 Mutual Funds' Trading after the Voting Outcome

If mutual funds find out that the voting outcome is not consistent with their votes when they vote against management, then they may be disappointed and reduce their ownership. In this section, I study how voting outcomes affect mutual funds' trading behavior.



The time line reflects the relationship between the meeting date and the dates with valid security holding information of mutual funds. Time -1 is the holding date just before the meeting date and time 1 is the holding date just after the meeting date. I consider all funds with voting records. I require the time between -1 and the meeting date to be no more than 90 days.

I use two trading measures. The first measure equals 1 if a mutual fund either decreases its security holdings or empties its position during the quarter, or six months after time -1 , and equals 0 otherwise. The second trading measure is the change in the percentage of shares held by mutual funds during the quarter, or six months, after time -1 . I require the meeting date to be within the trading period I consider.

Focusing on the “oppose management” proposals, I use a probit model to regress the first trading measure on an “inconsistency” dummy variable and other explanatory variables. The “inconsistency” dummy variable equals 1 if the voting outcome is not consistent with fund votes when funds vote against management, and 0 otherwise. Specifically, if mutual funds vote against management and the voting outcome is in favor of management, I assign 1 to the “inconsistency” dummy variable, and assign 0 in all other situations. All the other explanatory variables are measured at the end of trading period after -1 . Panel A of Table 7 reports the

results. Panel B of Table 7 reports the regression results using the second trading measure.

In Panel A of Table 7, the key variable is the “inconsistency” dummy variable. The coefficient on this variable in quarterly trading is not statistically significant. And the coefficient on this variable in six-month trading is statistically significant but the sign is not consistent with my expectation. The coefficients on the “inconsistency” dummy variable in Panel B of Table 7 are also not statistically significant in both quarterly and six-month trading.

5. Conclusion

Mutual funds can threaten management by selling their holdings to depress the stock price. They can also influence management directly by voting against management. Understanding the interaction between mutual funds’ trading and voting behavior helps us further understand the role of mutual funds in corporate governance. This paper provides evidence on this issue.

I find that mutual funds are involved in corporate governance by both exerting voting power and selling their shares. When management makes inconsistent recommendation with that of ISS for governance related proposals, mutual funds are more likely to exit or vote against management. However, mutual funds are more likely to use voting in corporate governance rather than exit, which indicates mutual funds are active monitors.

I also find that mutual fund and portfolio firm characteristics are related to the choice of opposing management vs. exit. Focus on proposals where management recommendations conflict with those of ISS, I find that mutual funds are more likely to vote against management in poorly governed firms. However, I find that mutual funds are less likely to either exit or oppose management in firms in which their families have a large stake. Further analysis is needed to explain why fund families with large stake are not active monitors. In contradiction to the literature, I find that long horizon funds are less likely to exit or to vote against management when they should oppose management. Mutual funds are more likely to exit rather than support

or oppose management for liquid stocks. This evidence is consistent with the idea that liquid markets can encourage firms to follow the “Wall Street rule”.

Further, I examine how mutual funds trade before the record date and after the voting outcome. I find that mutual funds’ trading and voting behavior are related before the record date. Mutual funds are more likely to buy high growth firms before the record date when they vote against management. However, I find limited evidence to support the argument that mutual funds’ trading and voting behavior are related after the voting outcome.

References

- Admati, Anat R., and Pfleiderer, Paul, 2006. The “Wall Street Walk” and shareholder activism: Exit as a form of voice. Working paper.
- Alexander, Cindy R., Chen, Mark A., Seppi, Duane J., and Spatt, Chester S., 2006. The role of advisory services in proxy voting. Working paper.
- Amihud, Y., 2002. Illiquidity and stock returns, cross-section and time-series effects. *Journal of Financial Markets* 5, 31–56.
- Ashraf, Rasha, and Jayaraman, Narayanan, 2007. Determinants and consequences of proxy voting by mutual funds on shareholder proposals. Working paper.
- Black, Bernard S., 1998. Shareholder activism and corporate governance in the United States. *The New Palgrave Dictionary of Economics and the Law* (Macmillan Reference Limited, London and Basingstoke).
- Brickley, James A., Lease, Ronald C., and Smith, Clifford W., Jr, 1988. Ownership structure and voting on antitakeover amendments. *Journal of Financial Economics* 20, 267–291.
- Chen, Xia, Harford, Jarrad, and Li, Kai, 2006. “Monitoring: Which institutions matter?” *Journal of Financial Economics*, forthcoming.
- Chou, Wen-Hsiu, Ng, Lilian, and Wang, Qinghai, 2007. Does corporate governance matter for mutual funds? Working paper.
- Davis, Gerald F. and Kim, E. Han, 2006. Business ties and proxy voting by mutual funds. *Journal of Financial Economics*, Volume 85, Issue 2, 552–570.
- Edmans, Alex, 2006. “Blockholders, market efficiency, and managerial myopia.” Working paper.
- Edmans, Alex, and Manso, Gustavo, 2007. Governance through exit and voice: A theory of multiple blockholders. Working paper.
- Gaspar, Jose-Miguel, Massa, Massimo, and Matos, Pedro, 2005. Shareholder investment

horizons and the market for corporate control. *Journal of Financial Economics* 76, 135–165.

Gillan, Stuart L. and Starks, Laura T., 1998. A survey of shareholder activism: motivation and empirical evidence. *Contemporary Finance Digest*, Autumn, 10–34.

Gillan, Stuart L., and Starks, Laura T., 2000. Corporate governance proposals and shareholder activism: The role of institutional investors. *Journal of Financial Economics* 57, 275–305.

Gompers, Paul A., Ishii, Joy L., and Metrick, Andrew, 2003. Corporate governance and equity prices. *Quarterly Journal of Economics* 118, 107–115

Gopalan, Radhakrishnan, 2005. Large shareholder trading and takeovers: The disciplinary role of voting with your feet. Working paper.

Gordon, Lilli A., and Pound, John, 1993. Information, ownership structure, and shareholder voting: Evidence from shareholder-sponsored corporate governance proposals. *Journal of Finance* 48, 697–718.

Investment Company Institute, 2007. *2007 Investment Company Fact Book*.

Kahn, C., and Winton, A., 1998. Ownership structure, speculation, and shareholder intervention. *Journal of Finance* 53, 99–129.

Karpoff, Jonathan M., 2001. The impact of shareholder activism on target companies: A survey of empirical findings. Working paper.

Lilien, Steven and Rothberg, Burton, 2005. Mutual funds and proxy voting: New evidence on corporate governance. Working paper.

Matvos, Gregor, and Ostrovsky, Michael, 2006a. Cross-ownership, returns, and voting in mergers: Conflicts of interest among shareholders. Working paper.

Matvos, Gregor, and Ostrovsky, Michael, 2006b. Strategic proxy voting. Working paper.

Maug, E., 1998. Large shareholders as monitors: Is there a trade-off between liquidity and control? *Journal of Finance* 53, 65–98.

Ng, Lilian, Wang, Qinghai, and Zaiats, Nataliya, 2007. Do mutual funds vote responsibly? Evidence from proxy voting. Working paper.

- Parrino, Robert, Sias, Richard, and Starks, Laura, 2003. Voting with their feet: Institutional ownership changes around forced CEO turnover. *Journal of Financial Economics* 68, 3–46.
- Praveen Kumar Das, 2007. Geographical proximity and mutual funds' proxy voting behavior. Working paper.
- Qiu, Xiaoli Lily, 2004. Which institutional investors monitor? Evidence from acquisition activity. Working paper.
- Roberta, Romano, 2000. Less is more: Making shareholder activism a valuable mechanism of corporate governance. Working paper.
- Shleifer, A., Vishny, R., 1986. Large shareholders and corporate control. *Journal of Political Economy* 94, 461–488.
- Wahal, Sunil, 1996. Pension fund activism and firm performance. *Journal of Financial and Quantitative Analysis* 31, 1–23.
- Ye, Pengfei, 2006. How do mutual funds use proxy voting mechanism to monitor corporate management? Working paper.

Table 1. Proposal Type

This table presents main corporate governance–related proposal types and the number of firm-proposals in each type from July 2003 to June 2006. For each proposal type, this table reports the number and percentage (in parentheses) of proposals sponsored by management, supported by management, and supported by ISS. This table also reports the number and percentage (in parentheses) of “oppose management” proposals, in which management recommendations conflict with those of ISS.

	Proposal Type	Number of Firm-Proposals	#, % Sponsored by Management	#, % Supported by Management	#, % Supported by ISS	#, % “Oppose Management” Proposals
Compensation-Related Proposals	Restrict Executive Compensation	144	0 (0%)	0 (0%)	23 (16%)	23 (16%)
	Approve Future Golden Parachutes	1	0 (0%)	0 (0%)	1 (100%)	1 (100%)
	Restrict Future Golden Parachutes	44	0 (0%)	1 (2%)	40 (91%)	39 (89%)
	Performance-Based Award	14	1 (7%)	1 (7%)	9 (64%)	8 (57%)
	Increase Disclosure of Executive Compensation	6	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	Expense Options	47	0 (0%)	0 (0%)	46 (98%)	46 (98%)
	Link Pay to Social or Financial Issues	7	0 (0%)	0 (0%)	1 (14%)	1 (14%)
Board-Related Proposals	Majority Vote to Elect Directors	78	1 (1%)	1 (1%)	67 (86%)	66 (85%)
	Independent Board Chairman	69	0 (0%)	0 (0%)	57 (83%)	57 (83%)
	Majority Independent Directors	16	0 (0%)	0 (0%)	10 (63%)	10 (63%)
	Repeal Classified Board	139	60 (43%)	60 (43%)	139 (100%)	79 (57%)
Antitakeover Provisions	Poison Pill Recession	60	0 (0%)	1 (2%)	52 (87%)	51 (85%)
	Adopt Poison Pill	6	3 (50%)	4 (67%)	5 (83%)	1 (17%)
	Adopt Cumulative Voting	43	0 (0%)	0 (0%)	38 (88%)	38 (88%)
	Eliminate Cumulative Voting	6	6 (100%)	6 (100%)	3 (50%)	3 (50%)
	Eliminate Supermajority Provision	21	20 (95%)	20 (95%)	21 (100%)	1 (5%)
Total		701	91 (13%)	94 (13%)	512 (73%)	424 (60%)

Table 2. Summary Statistics of Mutual Fund and Firm Characteristics

This table reports the summary statistics of mutual fund and portfolio firm characteristics. All variables are measured in the month of the record date. Mutual fund abnormal return is computed by subtracting the total net asset weighted average monthly return of all funds with the same Standard & Poor's objective code from fund monthly return. Portfolio firm abnormal return is computed by subtracting the market value weighted average monthly return of all firms with the same three-digit SIC code from firm monthly return. Insider ownership is the percentage of shares held by the top executives (up to nine executives). GIM index is Gompers, Ishii and Metrick (2003) governance scores. Institutional ownership is obtained from CDA/Spectrum 13f filings. Amihud's (2002) illiquidity measure is computed monthly by dividing the absolute value of firm's return by the dollar trading volume.

	Variables	Number of Observations	Mean	Median
Mutual Fund Characteristics	Turnover rate	5,135	0.88	0.72
	Expense ratio (%)	5,062	1.34	1.27
	Past 12 months average abnormal return (%)	4,893	-0.05	-0.07
	Family past 12 months average total net assets (billion)	593	47.17	16.58
Portfolio Firm Characteristics	Equity market value (billion)	432	26.19	10.49
	Book to market ratio	430	0.41	0.40
	Past 12 months abnormal return (%)	431	0.08	-0.13
	Insider ownership (%)	421	2.30	0.29
	GIM Index	431	9.79	10.00
	Institutional ownership (%)	431	70.04	71.25
	Past 12 months average dollar trading volume (billion)	431	2.37	1.15
Past 12 months average Amihud illiquidity measure (%)	431	0.039	0.005	

Table 3. Analysis of Mutual Funds' Choice of Exit vs. Casting Their Votes – Full Sample Analysis

This table analyzes whether mutual funds exit or vote against management when management recommendations conflict with those of ISS (“oppose management” proposals). Panel A presents the percentage of mutual funds voting in favor of management, exiting and voting against management for the “oppose management” proposals and other proposals. Panel B presents the multinomial logit regression results. The dependent variable equals 0 if mutual funds vote in favor of management, equals 1 if mutual funds exit, and equals 2 if mutual funds vote against management. The base group used in the regression is either mutual funds voting with management or exit. “Oppose management” proposal dummy equals 1 for proposals with inconsistent management and ISS recommendations, equals 0 for other proposals. All firm and fund characteristic variables are measured in the month of mutual fund ownership effective date just prior to the record date. Long-term shareholder dummy indicates funds which hold shares for one year or longer. Panel B reports coefficients, p value (in parentheses) and marginal effects (M.E.) in percentage, which are calculated at the means of the independent variables. The marginal effect of a dummy variable is calculated as the dummy variable changes from 0 to 1. Statistical significance at the 1 percent, 5 percent, and 10 percent level is indicated by ***, **, and * respectively.

Panel A. Percentage of mutual funds voting in favor of management, selling all shares and voting against management

	Percentage of Funds Voting with Management (%)	Percentage of Funds Exiting (%)	Percentage of Funds Voting against Management (%)	Number of Observations
“Oppose Management” Proposals	40.00	12.16	47.84	22,309
Other Proposals	84.91	11.95	3.14	16,411
Difference	-44.91***	0.21	44.70***	

Table 3 Panel B. Multinomial logit regression of mutual funds' choices of voting in favor of management, exiting, and voting against management

	Base Group: Vote with Management (0)				Base Group: Exit (1)			
	Exit (1)		Vote Against Management (2)		Vote With Management (0)		Vote Against Management (2)	
	Coefficients	M.E. (%)	Coefficients	M.E. (%)	Coefficients	M.E. (%)	Coefficients	M.E. (%)
“Oppose management” proposal dummy	1.104*** (0.000)	2.92	4.533*** (0.000)	47.20	-1.104*** (0.000)	-50.12	3.429*** (0.000)	47.20
Fund percentage of shares held (%)	-0.274*** (0.000)	-3.26	0.065 (0.172)	1.25	0.274*** (0.000)	2.01	0.339*** (0.000)	1.25
Long term shareholder dummy	-0.340*** (0.000)	-4.06	-0.041 (0.314)	0.18	0.340*** (0.000)	3.89	0.299*** (0.000)	0.18
Fund past 12 months average abnormal return (%)	-0.207*** (0.001)	-2.29	-0.048 (0.376)	-0.19	0.207*** (0.001)	2.49	0.158** (0.020)	-0.19
Fund family percentage of shares held (%)	-0.014 (0.478)	-0.04	-0.065*** (0.001)	-0.73	0.014 (0.478)	0.77	-0.051** (0.035)	-0.73
Logarithm of fund family past 12 months average total net assets	-2.087*** (0.000)	-23.62	-0.210 (0.166)	1.27	2.087*** (0.000)	22.34	1.876*** (0.000)	1.27
Logarithm of firm equity market value	-0.425*** (0.000)	-4.91	0.015 (0.526)	0.93	0.425*** (0.000)	3.98	0.440*** (0.000)	0.93
Firm book-to-market ratio	0.026 (0.358)	0.09	0.114*** (0.004)	1.29	-0.026 (0.358)	-1.38	0.089** (0.033)	1.29
Firm past 12 months average abnormal return (%)	0.001 (0.919)	0.03	-0.007 (0.513)	-0.08	-0.001 (0.919)	0.06	-0.008 (0.511)	-0.08
GIM Index	0.011 (0.216)	0.08	0.026*** (0.002)	0.28	-0.011 (0.216)	-0.36	0.014 (0.163)	0.28
Insider ownership (%)	-0.003 (0.293)	-0.03	-0.007 (0.159)	-0.07	0.003 (0.293)	0.10	-0.003 (0.503)	-0.07
Other institutions percentage of shares held (%)	-0.003** (0.042)	-0.02	-0.008*** (0.000)	-0.09	0.003** (0.042)	0.11	-0.005** (0.018)	-0.09
Firm past 12 months average dollar trading volume (billion)	0.022*** (0.000)	0.29	-0.021*** (0.000)	-0.28	-0.022*** (0.000)	-0.01	-0.043*** (0.000)	-0.28
Firm past 12 months average Amihud illiquidity measure	-0.133** (0.026)	-1.54	0.011 (0.823)	0.37	0.133** (0.026)	1.18	0.144** (0.013)	0.37
Intercept	10.483*** (0.000)		-5.301*** (0.000)		-10.483*** (0.000)		-15.784*** (0.000)	
Year, fund family, proposal type dummies	Yes		Yes		Yes		Yes	
Observations	35404		35404		35404		35404	
Pseudo R-squared	0.357		0.357		0.357		0.357	

Table 4. Analysis of Mutual Funds' Choice of Exit vs. Casting Their Votes – Subsample Analysis

This table analyzes how mutual fund and firm characteristics affect mutual funds' choice of exit vs. voting against management. Panel A and B present the multinomial logit regression results when management recommendations conflict with those of ISS ("oppose management" proposals). Panel C and D present the multinomial logit regression results for other proposals. Panel A and C use a long-term shareholder dummy variable and Panel B and D use fund turnover rates to measure fund investment horizons respectively. Long-term shareholder dummy variable indicates funds which hold shares for one year or longer. In all the panels, the dependent variable equals 0 if mutual funds vote in favor of management, equals 1 if mutual funds exit, and equals 2 if mutual funds vote against management. Base group used in the regression is either mutual funds voting with management or exiting. All firm and fund characteristic variables are measured in the month of mutual fund ownership effective date just prior to the record date. All the panels report coefficients, p value (in parentheses) and marginal effects (M.E.) in percentage, which are calculated at the means of the independent variables. The marginal effect of a dummy variable is calculated as the dummy variable changes from 0 to 1. Statistical significance at the 1 percent, 5 percent, and 10 percent level is indicated by ***, **, and * respectively.

Panel A: "Oppose Management" Proposals (Long term shareholder dummy)

	Base Group: Vote With Management (0)				Base Group: Exit (1)			
	Exit (1)		Vote Against Management (2)		Vote With Management (0)		Vote Against Management (2)	
	Coefficients	M.E. (%)	Coefficients	M.E. (%)	Coefficients	M.E. (%)	Coefficients	M.E. (%)
Fund percentage of shares held (%)	-0.370*** (0.001)	-4.59	0.061 (0.263)	3.78	0.370*** (0.001)	0.82	0.431*** (0.000)	3.78
Long term shareholder dummy	-0.355*** (0.000)	-3.54	-0.109** (0.026)	-0.39	0.355*** (0.000)	3.94	0.247*** (0.000)	-0.39
Fund past 12 months average abnormal return (%)	-0.161* (0.050)	-1.66	-0.029 (0.656)	0.26	0.161* (0.050)	1.39	0.132 (0.110)	0.26
Fund family percentage of shares held (%)	-0.048* (0.077)	0.21	-0.123*** (0.000)	-2.76	0.048* (0.077)	2.55	-0.075** (0.012)	-2.76
Logarithm of fund family past 12 months average total net assets	-1.891*** (0.000)	-20.15	-0.233 (0.252)	5.79	1.891*** (0.000)	14.35	1.658*** (0.000)	5.79
Logarithm of firm equity market value	-0.405*** (0.000)	-4.39	-0.037 (0.226)	1.56	0.405*** (0.000)	2.83	0.368*** (0.000)	1.56
Firm book-to-market ratio	0.027 (0.522)	-0.33	0.104** (0.037)	2.42	-0.027 (0.522)	-2.10	0.077 (0.124)	2.42
Firm past 12 months average abnormal return (%)	0.012 (0.476)	0.12	0.002 (0.859)	-0.01	-0.012 (0.476)	-0.11	-0.009 (0.557)	-0.01
GIM Index	0.019 (0.139)	-0.03	0.041*** (0.000)	0.89	-0.019 (0.139)	-0.86	0.021 (0.104)	0.89
Insider ownership (%)	0.015* (0.079)	0.16	0.003 (0.700)	-0.02	-0.015* (0.079)	-0.13	-0.012 (0.108)	-0.02
Other institutions percentage of shares held (%)	-0.001 (0.621)	0.05	-0.010*** (0.000)	-0.24	0.001 (0.621)	0.19	-0.009*** (0.001)	-0.24
Firm past 12 months average dollar trading volume (billion)	0.018** (0.028)	0.33	-0.021*** (0.001)	-0.62	-0.018** (0.028)	0.29	-0.038*** (0.000)	-0.62
Firm past 12 months average Amihud illiquidity measure	-0.277*** (0.002)	-2.85	-0.051 (0.356)	0.43	0.277*** (0.002)	2.42	0.226*** (0.007)	0.43
Intercept	9.564*** (0.000)		-1.021 (0.394)		-9.564*** (0.000)		-10.585*** (0.000)	
Year, fund family, proposal type dummies	Yes		Yes		Yes		Yes	
Observations	18480		18480		18480		18480	
Pseudo R-squared	0.316		0.316		0.316		0.316	

Panel B: "Oppose Management" Proposals (Fund turnover rate)

	Base Group: Vote With Management (0)				Base Group: Exit (1)			
	Exit (1)		Vote Against Management (2)		Vote With Management (0)		Vote Against Management (2)	
	Coefficients	M.E. (%)	Coefficients	M.E. (%)	Coefficients	M.E. (%)	Coefficients	M.E. (%)
Fund percentage of shares held (%)	-0.374*** (0.001)	-4.62	0.056 (0.301)	3.70	0.374*** (0.001)	0.92	0.430*** (0.000)	3.70
Fund turnover rate	0.129*** (0.006)	1.53	-0.009 (0.811)	-1.03	-0.129*** (0.006)	-0.51	-0.138*** (0.002)	-1.03
Fund past 12 months average abnormal return (%)	-0.165** (0.044)	-1.73	-0.025 (0.698)	0.38	0.165** (0.044)	1.35	0.139* (0.091)	0.38
Fund family percentage of shares held (%)	-0.053* (0.051)	0.16	-0.124*** (0.000)	-2.75	0.053* (0.051)	2.60	-0.071** (0.017)	-2.75
Logarithm of fund family past 12 months average total net assets	-1.946*** (0.000)	-20.80	-0.238 (0.242)	6.04	1.946*** (0.000)	14.75	1.708*** (0.000)	6.04
Logarithm of firm equity market value	-0.419*** (0.000)	-4.53	-0.041 (0.173)	1.54	0.419*** (0.000)	2.99	0.377*** (0.000)	1.54
Firm book-to-market ratio	0.023 (0.594)	-0.35	0.100** (0.045)	2.36	-0.023 (0.594)	-2.00	0.077 (0.121)	2.36
Firm past 12 months average abnormal return (%)	0.012 (0.467)	0.12	0.003 (0.804)	0.01	-0.012 (0.467)	-0.13	-0.009 (0.589)	0.01
GIM Index	0.021 (0.116)	-0.02	0.042*** (0.000)	0.91	-0.021 (0.116)	-0.89	0.021 (0.109)	0.91
Insider ownership (%)	0.015* (0.088)	0.15	0.003 (0.659)	-0.01	-0.015* (0.088)	-0.14	-0.012 (0.133)	-0.01
Other institutions percentage of shares held (%)	-0.001 (0.701)	0.05	-0.010*** (0.000)	-0.24	0.001 (0.701)	0.19	-0.009*** (0.001)	-0.24
Firm past 12 months average dollar trading volume (billion)	0.016** (0.046)	0.31	-0.021*** (0.001)	-0.61	-0.016** (0.046)	0.30	-0.037*** (0.000)	-0.61
Firm past 12 months average Amihud illiquidity measure	-0.286*** (0.002)	-2.94	-0.054 (0.327)	0.42	0.286*** (0.002)	2.52	0.232*** (0.007)	0.42
Intercept	9.555*** (0.000)		-1.062 (0.375)		-9.555*** (0.000)		-10.617*** (0.000)	
Year, fund family, proposal type dummies	Yes		Yes		Yes		Yes	
Observations	18480		18480		18480		18480	
Pseudo R-squared	0.316		0.316		0.316		0.316	

Panel C: Other Proposals (Long term shareholder dummy)

	Base Group: Vote With Management (0)				Base Group: Exit (1)			
	Exit (1)		Vote Against Management (2)		Vote With Management (0)		Vote Against Management (2)	
	Coefficients	M.E. (%)	Coefficients	M.E. (%)	Coefficients	M.E. (%)	Coefficients	M.E. (%)
Fund percentage of shares held (%)	-0.172* (0.099)	-1.33	-0.062 (0.694)	-0.05	0.172* (0.099)	1.38	0.110 (0.548)	-0.05
Long term shareholder dummy	-0.312*** (0.000)	-2.59	0.007 (0.961)	0.03	0.312*** (0.000)	2.56	0.319** (0.034)	0.03
Fund past 12 months average abnormal return (%)	-0.337*** (0.001)	-2.61	-0.043 (0.816)	-0.01	0.337*** (0.001)	2.63	0.294 (0.152)	-0.01
Fund family percentage of shares held (%)	0.067** (0.028)	0.49	0.394*** (0.000)	0.38	-0.067** (0.028)	-0.86	0.327*** (0.000)	0.38
Logarithm of fund family past 12 months average total net assets	-2.987*** (0.000)	-23.05	-1.484*** (0.003)	-1.19	2.987*** (0.000)	24.24	1.503*** (0.008)	-1.19
Logarithm of firm equity market value	-0.429*** (0.000)	-3.32	-0.100 (0.383)	-0.06	0.429*** (0.000)	3.38	0.329*** (0.007)	-0.06
Firm book-to-market ratio	0.076 (0.116)	0.56	0.363* (0.092)	0.35	-0.076 (0.116)	-0.91	0.287 (0.189)	0.35
Firm past 12 months average abnormal return (%)	-0.025 (0.158)	-0.20	0.060 (0.125)	0.06	0.025 (0.158)	0.14	0.084** (0.040)	0.06
GIM Index	0.044*** (0.007)	0.35	-0.069** (0.044)	-0.07	-0.044*** (0.007)	-0.28	-0.114*** (0.002)	-0.07
Insider ownership (%)	-0.007* (0.061)	-0.06	-0.021 (0.588)	-0.02	0.007* (0.061)	0.08	-0.013 (0.731)	-0.02
Other institutions percentage of shares held (%)	-0.003 (0.204)	-0.03	-0.012** (0.035)	-0.01	0.003 (0.204)	0.04	-0.008 (0.169)	-0.01
Firm past 12 months average dollar trading volume (billion)	0.053*** (0.001)	0.41	-0.004 (0.885)	-0.01	-0.053*** (0.001)	-0.40	-0.058* (0.090)	-0.01
Firm past 12 months average Amihud illiquidity measure	0.021 (0.700)	0.32	-1.913** (0.025)	-1.85	-0.021 (0.700)	1.53	-1.934** (0.024)	-1.85
Intercept	15.800*** (0.000)		4.636 (0.118)		-15.800*** (0.000)		-11.163*** (0.001)	
Year, fund family, proposal type dummies	Yes		Yes		Yes		Yes	
Observations	12196		12196		12196		12196	
Pseudo R-squared	0.200		0.200		0.200		0.200	

Panel D: Other Proposals (Fund turnover rate)

	Base Group: Vote With Management (0)				Base Group: Exit (1)			
	Exit (1)		Vote Against Management (2)		Vote With Management (0)		Vote Against Management (2)	
	Coefficients	M.E. (%)	Coefficients	M.E. (%)	Coefficients	M.E. (%)	Coefficients	M.E. (%)
Fund percentage of shares held (%)	-0.150 (0.147)	-1.15	-0.075 (0.637)	-0.06	0.150 (0.147)	1.21	0.075 (0.683)	-0.06
Fund turnover rate	0.245*** (0.000)	1.91	-0.130 (0.252)	-0.15	-0.245*** (0.000)	-1.76	-0.376*** (0.002)	-0.15
Fund past 12 months average abnormal return (%)	-0.348*** (0.001)	-2.69	-0.044 (0.816)	-0.01	0.348*** (0.001)	2.70	0.304 (0.139)	-0.01
Fund family percentage of shares held (%)	0.056* (0.064)	0.40	0.397*** (0.000)	0.38	-0.056* (0.064)	-0.78	0.341*** (0.000)	0.38
Logarithm of fund family past 12 months average total net assets	-3.023*** (0.000)	-23.26	-1.470*** (0.003)	-1.17	3.023*** (0.000)	24.43	1.554*** (0.006)	-1.17
Logarithm of firm equity market value	-0.444*** (0.000)	-3.43	-0.103 (0.369)	-0.06	0.444*** (0.000)	3.49	0.341*** (0.005)	-0.06
Firm book-to-market ratio	0.071 (0.147)	0.52	0.349 (0.103)	0.33	-0.071 (0.147)	-0.85	0.279 (0.200)	0.33
Firm past 12 months average abnormal return (%)	-0.024 (0.165)	-0.19	0.064 (0.101)	0.06	0.024 (0.165)	0.13	0.088** (0.031)	0.06
GIM Index	0.043*** (0.009)	0.34	-0.069** (0.045)	-0.07	-0.043*** (0.009)	-0.27	-0.112*** (0.002)	-0.07
Insider ownership (%)	-0.008** (0.050)	-0.06	-0.020 (0.585)	-0.02	0.008** (0.050)	0.08	-0.012 (0.742)	-0.02
Other institutions percentage of shares held (%)	-0.004 (0.166)	-0.03	-0.012** (0.036)	-0.01	0.004 (0.166)	0.04	-0.008 (0.188)	-0.01
Firm past 12 months average dollar trading volume (billion)	0.048*** (0.002)	0.37	-0.003 (0.931)	-0.01	-0.048*** (0.002)	-0.37	-0.051 (0.134)	-0.01
Firm past 12 months average Amihud illiquidity measure	0.018 (0.743)	0.30	-1.935** (0.023)	-1.87	-0.018 (0.743)	1.57	-1.952** (0.022)	-1.87
Intercept	15.653*** (0.000)		4.676 (0.113)		-15.653*** (0.000)		-10.977*** (0.001)	
Year, fund family, proposal type dummies	Yes		Yes		Yes		Yes	
Observations	12195		12195		12195		12195	
Pseudo R-squared	0.201		0.201		0.201		0.201	

Table 5. Analysis of Mutual Funds' Choice of Exit vs. Casting Their Votes – Subsample of proposals with close voting outcomes

This table analyzes how mutual fund and firm characteristics affect mutual funds' choice of exit vs. voting against management for the proposals with close voting outcomes. Panel A and B present the multinomial logit regression results when management recommendations conflict with those of ISS ("oppose management" proposals). Panel A uses a long-term shareholder dummy variable and Panel B uses fund turnover rates to measure fund investment horizons respectively. Long-term shareholder dummy variable indicates funds which hold shares for one year or longer. In all the panels, the dependent variable equals 0 if mutual funds vote in favor of management, equals 1 if mutual funds exit, and equals 2 if mutual funds vote against management. Base group used in the regression is either mutual funds voting with management or exiting. All firm and fund characteristic variables are measured in the month of mutual fund ownership effective date just prior to the record date. All the panels report coefficients, p value (in parentheses) and marginal effects (M.E.) in percentage, which are calculated at the means of the independent variables. The marginal effect of a dummy variable is calculated as the dummy variable changes from 0 to 1. Statistical significance at the 1 percent, 5 percent, and 10 percent level is indicated by ***, **, and * respectively.

Table 5. Panel A: “Oppose Management” Proposals (Long term shareholder dummy)

	Base Group: Vote With Management (0)				Base Group: Exit (1)			
	Exit (1)		Vote Against Management (2)		Vote With Management (0)		Vote Against Management (2)	
	Coefficients	M.E. (%)	Coefficients	M.E. (%)	Coefficients	M.E. (%)	Coefficients	M.E. (%)
Fund percentage of shares held (%)	-0.589** (0.036)	-8.45	0.310** (0.023)	11.19	0.589** (0.036)	-2.75	0.899*** (0.002)	11.19
Long term shareholder dummy	-0.305*** (0.008)	-3.07	-0.080 (0.369)	-0.09	0.305*** (0.008)	3.16	0.225** (0.046)	-0.09
Fund past 12 months average abnormal return (%)	-0.295* (0.058)	-3.27	-0.007 (0.952)	1.56	0.295* (0.058)	1.70	0.288* (0.062)	1.56
Fund family percentage of shares held (%)	-0.331*** (0.000)	-0.17	-0.598*** (0.000)	-12.90	0.331*** (0.000)	13.07	-0.268*** (0.002)	-12.90
Logarithm of fund family past 12 months average total net assets	-1.303** (0.013)	-14.82	0.033 (0.930)	8.54	1.303** (0.013)	6.28	1.336*** (0.008)	8.54
Logarithm of firm equity market value	-0.250*** (0.004)	-2.57	-0.039 (0.554)	0.50	0.250*** (0.004)	2.07	0.210** (0.013)	0.50
Firm book-to-market ratio	0.601** (0.036)	4.47	0.384* (0.081)	5.98	-0.601** (0.036)	-10.45	-0.217 (0.432)	5.98
Firm past 12 months average abnormal return (%)	0.014 (0.726)	0.30	-0.024 (0.422)	-0.68	-0.014 (0.726)	0.38	-0.038 (0.334)	-0.68
GIM Index	0.058** (0.047)	0.24	0.069*** (0.002)	1.37	-0.058** (0.047)	-1.61	0.011 (0.691)	1.37
Insider ownership (%)	0.040** (0.029)	0.35	0.017 (0.276)	0.18	-0.040** (0.029)	-0.53	-0.024 (0.141)	0.18
Other institutions percentage of shares held (%)	0.007 (0.282)	0.15	-0.011** (0.028)	-0.32	-0.007 (0.282)	0.17	-0.019*** (0.004)	-0.32
Firm past 12 months average dollar trading volume (billion)	0.009 (0.583)	0.18	-0.013 (0.254)	-0.38	-0.009 (0.583)	0.20	-0.022 (0.158)	-0.38
Firm past 12 months average Amihud illiquidity measure	-0.130 (0.345)	-1.39	-0.011 (0.923)	0.50	0.130 (0.345)	0.90	0.119 (0.317)	0.50
Intercept	2.777 (0.401)		-3.395 (0.144)		-2.777 (0.401)		-6.172* (0.053)	
Year, fund family, proposal type dummies	Yes		Yes		Yes		Yes	
Observations	5553		5553		5553		5553	
Pseudo R-squared	0.307		0.307		0.307		0.307	

Table 5. Panel B: “Oppose Management” Proposals (Fund turnover rate)

	Base Group: Vote With Management (0)				Base Group: Exit (1)			
	Exit (1)		Vote Against Management (2)		Vote With Management (0)		Vote Against Management (2)	
	Coefficients	M.E. (%)	Coefficients	M.E. (%)	Coefficients	M.E. (%)	Coefficients	M.E. (%)
Fund percentage of shares held (%)	-0.614** (0.031)	-8.70	0.302** (0.028)	11.15	0.614** (0.031)	-2.45	0.916*** (0.002)	11.15
Fund turnover rate	0.064 (0.467)	0.76	-0.007 (0.923)	-0.56	-0.064 (0.467)	-0.20	-0.071 (0.362)	-0.56
Fund past 12 months average abnormal return (%)	-0.280* (0.071)	-3.13	-0.005 (0.970)	1.55	0.280* (0.071)	1.58	0.276* (0.074)	1.55
Fund family percentage of shares held (%)	-0.333*** (0.000)	-0.19	-0.599*** (0.000)	-12.90	0.333*** (0.000)	13.09	-0.266*** (0.002)	-12.90
Logarithm of fund family past 12 months average total net assets	-1.351** (0.010)	-15.36	0.025 (0.947)	8.65	1.351** (0.010)	6.71	1.376*** (0.007)	8.65
Logarithm of firm equity market value	-0.261*** (0.003)	-2.68	-0.043 (0.522)	0.49	0.261*** (0.003)	2.19	0.218*** (0.009)	0.49
Firm book-to-market ratio	0.590** (0.039)	4.38	0.381* (0.084)	5.95	-0.590** (0.039)	-10.33	-0.209 (0.450)	5.95
Firm past 12 months average abnormal return (%)	0.012 (0.769)	0.27	-0.023 (0.441)	-0.65	-0.012 (0.769)	0.37	-0.035 (0.377)	-0.65
GIM Index	0.058** (0.045)	0.24	0.070*** (0.002)	1.38	-0.058** (0.045)	-1.62	0.012 (0.677)	1.38
Insider ownership (%)	0.043** (0.020)	0.37	0.018 (0.235)	0.20	-0.043** (0.020)	-0.57	-0.025 (0.123)	0.20
Other institutions percentage of shares held (%)	0.008 (0.264)	0.15	-0.011** (0.029)	-0.32	-0.008 (0.264)	0.17	-0.019*** (0.004)	-0.32
Firm past 12 months average dollar trading volume (billion)	0.009 (0.572)	0.18	-0.013 (0.270)	-0.37	-0.009 (0.572)	0.19	-0.022 (0.159)	-0.37
Firm past 12 months average Amihud illiquidity measure	-0.130 (0.346)	-1.40	-0.010 (0.931)	0.53	0.130 (0.346)	0.87	0.120 (0.311)	0.53
Intercept	2.727 (0.411)		-3.425 (0.141)		-2.727 (0.411)		-6.153* (0.055)	
Year, fund family, proposal type dummies	Yes		Yes		Yes		Yes	
Observations	5553		5553		5553		5553	
Pseudo R-squared	0.307		0.307		0.307		0.307	

Table 6. Analysis of mutual funds' trading before the record date

This table analyzes how firm characteristics affect mutual funds' trading before the record date when management recommendation for a proposal conflicts with that of ISS. Panel A presents the probit regression of the changes in holdings in the previous quarter and 6 months before the record date. The dependent variable equals 1 if mutual funds increase holdings before the voting, equals 0 otherwise. Panel A reports coefficients, p value (in parentheses) and marginal effects (M.E.) in percentage, which are calculated at the means of the independent variables. The marginal effect of a dummy variable is calculated as the dummy variable changes from 0 to 1. The dependent variable in Panel B is the change in the percentage of shares owned in the previous quarter and 6 months before the record date. The dependent variable in Panel B is measured in percentage. Panel B reports coefficients, p value (in parentheses). The fund vote cast equals 1 if a fund votes against management, and equals 0 if she votes with management. The buying intensity is defined as the increase in portfolio size, based on prices on the beginning of the quarter, due to purchases of all the other stocks. All firm and fund characteristic variables are measured in the month of mutual funds ownership effective date just prior to the record date. Statistical significance at the 1 percent, 5 percent, and 10 percent level is indicated by ***, **, and * respectively.

Table 6 Panel A. Probit regression: the dependent variable equals 1 if mutual funds increase shares in the previous quarter and six months before the record date, equals 0 otherwise.

	Previous Quarter		Previous 6 months	
	Coefficients	M.E. (%)	Coefficients	M.E. (%)
Fund vote cast	0.005 (0.970)	0.2	-0.100 (0.440)	-3.9
Fund vote cast * Logarithm of firm equity market value	0.023 (0.370)	0.9	0.031 (0.230)	1.2
Fund vote cast * Firm book-to-market ratio	-0.086* (0.087)	-3.4	0.032 (0.500)	1.3
Fund vote cast * Firm past abnormal return	0.021 (0.120)	0.8	0.026** (0.038)	1.0
Fund vote cast * GIM Index	-0.001 (0.930)	0	0.001 (0.910)	0
Fund vote cast * Insider ownership	-0.012 (0.100)	-0.5	-0.013* (0.071)	-0.5
Fund vote cast * Firm past dollar trading volume	-0.002 (0.790)	-0.1	-0.002 (0.770)	-0.1
Fund vote cast * Firm past Amihud illiquidity measure	-0.065 (0.360)	-2.6	-0.154* (0.064)	-6.0
Logarithm of firm equity market value	-0.006 (0.770)	-0.2	0.046** (0.027)	1.8
Firm book-to-market ratio	0.020 (0.410)	0.8	0.008 (0.760)	0.3
Firm past 12 months average abnormal return	-0.017 (0.100)	-0.7	-0.012 (0.190)	-0.5
GIM Index	-0.003 (0.660)	-0.1	0.001 (0.840)	0.1
Insider ownership	0.005 (0.360)	0.2	0.012** (0.046)	0.5
Firm past 12 months average dollar trading volume	-0.003 (0.470)	-0.1	-0.009** (0.031)	-0.3
Firm past 12 months average Amihud illiquidity measure	0.085 (0.210)	3.4	0.177** (0.028)	6.9
Other institutions percentage of shares held	-0.002** (0.016)	-0.1	-0.000 (0.840)	0
Fund previous percentage of shares held	-0.123*** (0.000)	-4.9	-0.276*** (0.000)	-10.8
Long term shareholder dummy	-0.638*** (0.000)	-25.0	-0.813*** (0.000)	-29.5
Index fund dummy	0.421*** (0.000)	16.7	0.395*** (0.000)	14.9
Fund turnover rate	0.033 (0.120)	1.3	0.010 (0.640)	0.4
Buying intensity	0.406*** (0.000)	16.1	0.541*** (0.000)	21.1
Fund expense ratio	10.547*** (0.001)	419.1	9.019*** (0.003)	352.0
Fund past 12 months average abnormal return	0.094*** (0.004)	3.7	0.155*** (0.000)	6.1
Fund family percentage of shares held	0.020* (0.095)	0.8	0.080*** (0.000)	3.1
Logarithm of fund family past 12 months average total net of assets	-0.122 (0.180)	-4.9	0.039 (0.670)	1.5
Intercept	0.892 (0.110)		0.032 (0.950)	
Year, fund family, proposal type dummies	Yes		Yes	
Observations	17209		18642	
Pseudo R-squared	0.114		0.124	

Table 6 Panel B. The dependent variable is the change in the percentage of shares owned in the previous quarter and six months before the record date, measured in percentage.

	Previous Quarter	Previous 6 months
Fund vote cast	-0.004 (0.700)	-0.002 (0.930)
Fund vote cast * Logarithm of firm equity market value	-0.001 (0.580)	0.000 (0.960)
Fund vote cast * Firm book-to-market ratio	0.005 (0.170)	0.009 (0.330)
Fund vote cast * Firm past abnormal return	0.001 (0.250)	-0.003 (0.220)
Fund vote cast * GIM Index	0.001 (0.140)	0.001 (0.490)
Fund vote cast * Insider ownership	-0.002*** (0.002)	-0.000 (0.810)
Fund vote cast * Firm past dollar trading volume	0.000 (0.340)	0.000 (0.920)
Fund vote cast * Firm past Amihud illiquidity measure	-0.007 (0.210)	-0.019 (0.200)
Logarithm of firm equity market value	-0.005*** (0.001)	-0.031*** (0.000)
Firm book-to-market ratio	-0.001 (0.550)	0.004 (0.380)
Firm past 12 months average abnormal return	-0.001 (0.370)	0.000 (0.820)
GIM Index	-0.001* (0.054)	-0.003** (0.017)
Insider ownership	0.000 (0.840)	0.001 (0.370)
Firm past 12 months average dollar trading volume	0.000 (0.120)	0.003*** (0.000)
Firm past 12 months average Amihud illiquidity measure	0.009* (0.075)	0.023* (0.094)
Other institutions percentage of shares held	0.000 (0.170)	-0.000 (0.420)
Fund previous percentage of shares held	-0.036*** (0.000)	-0.457*** (0.000)
Long term shareholder dummy	-0.033*** (0.000)	-0.026*** (0.000)
Index fund dummy	-0.002 (0.330)	-0.026*** (0.000)
Fund turnover rate	-0.006*** (0.000)	-0.021*** (0.000)
Buying intensity	0.005** (0.048)	-0.002 (0.820)
Fund expense ratio	-0.796*** (0.000)	-4.120*** (0.000)
Fund past 12 months average abnormal return	0.007*** (0.004)	0.040*** (0.000)
Fund family percentage of shares held	0.009*** (0.000)	0.077*** (0.000)
Logarithm of fund family past 12 months average total net of assets	-0.013* (0.052)	0.017 (0.330)
Intercept	0.131*** (0.001)	0.121 (0.260)
Year, fund family, proposal type dummies	Yes	Yes
Observations	17239	18663
R-squared	0.065	0.398

Table 7. Analysis of mutual funds' trading after the voting outcome

This table analyzes mutual funds' trading after the voting outcome when management recommendation for a proposal conflicts with that of ISS. Panel A reports the probit regression results. The dependent variable equals 1 if mutual funds reduce shares in the next quarter or six months after the voting outcome, equals 0 otherwise. Panel A reports coefficients, p value (in parentheses) and marginal effects (M.E.) in percentage, which are calculated at the means of the independent variables. The marginal effect of a dummy variable is calculated as the dummy variable changes from 0 to 1. The dependent variable in Panel B is the change in the percentage of shares owned in the next quarter or six months after the voting outcome. The dependent variable in Panel B is measured in percentage. Panel B reports coefficients, p value (in parentheses). The "inconsistency" dummy variable equals 1 if mutual funds vote against management but management wins, and 0 otherwise. All firm and fund characteristic variables are measured at the end of trading period. Statistical significance at the 1 percent, 5 percent, and 10 percent level is indicated by ***, **, and * respectively.

Table 7 Panel A. Probit regression: the dependent variable equals 1 if mutual funds reduce shares in the next quarter or six months or after the voting outcome, equals 0 otherwise.

	Next Quarter		Next 6 months	
	Coefficients	M.E. (%)	Coefficients	M.E. (%)
“Inconsistency” dummy	-0.013 (0.700)	-0.5	-0.106*** (0.006)	-4.1
Logarithm of firm equity market value	0.021 (0.180)	0.8	0.001 (0.950)	0
Firm book-to-market ratio	0.003 (0.880)	0.1	-0.007 (0.320)	-0.3
Firm past 12 months average abnormal return	-0.032*** (0.000)	-1.2	-0.035*** (0.000)	-1.4
GIM Index	-0.008 (0.150)	-0.3	0.010 (0.110)	0.4
Insider ownership	0.007* (0.082)	0.3	0.004 (0.380)	0.2
Firm past 12 months average dollar trading volume	0.005* (0.061)	0.2	0.000 (1.000)	0
Firm past 12 months average Amihud illiquidity measure	0.008 (0.640)	0.3	-0.022 (0.400)	-0.8
Fund previous percentage of shares held	0.233*** (0.000)	8.7	0.331*** (0.000)	13.0
Fund family percentage of shares held	-0.092*** (0.000)	-3.4	-0.127*** (0.000)	-5.0
Other institutions percentage of shares held	-0.004*** (0.002)	-0.1	-0.005*** (0.000)	-0.2
Long term shareholder dummy	-0.231*** (0.000)	-8.7	-0.528*** (0.000)	-20.8
Index fund dummy	0.326*** (0.000)	12.5	-0.041 (0.410)	-1.6
Fund turnover rate	0.198*** (0.000)	7.4	0.178*** (0.000)	7.0
Buying intensity	0.014 (0.470)	0.5	-0.112*** (0.000)	-4.4
Fund expense ratio	-8.566** (0.017)	-319.9	-15.380*** (0.000)	-604.5
Fund past 12 months average abnormal return	-0.423*** (0.000)	-15.8	-0.310*** (0.000)	-12.2
Intercept	-0.188 (0.170)		0.573*** (0.000)	
Year, fund family, proposal type dummies	Yes		Yes	
Observations	13494		11139	
Pseudo R-squared	0.111		0.143	

Table 7 Panel B. The dependent variable is the change in the percentage of shares owned by mutual funds, measured in percentage

	Next Quarter	Next 6 Months
“Inconsistency” dummy	0.002 (0.410)	0.003 (0.580)
Logarithm of firm equity market value	0.004*** (0.002)	0.002 (0.510)
Firm book-to-market ratio	0.001 (0.460)	0.001 (0.360)
Firm past 12 months average abnormal return	0.002*** (0.001)	0.000 (0.870)
GIM Index	0.001* (0.057)	0.000 (0.580)
Insider ownership	-0.000 (0.820)	-0.000 (0.870)
Firm past 12 months average dollar trading volume	-0.000 (0.300)	-0.000 (0.910)
Firm past 12 months average Amihud illiquidity measure	0.001 (0.420)	0.007** (0.030)
Fund previous percentage of shares held	-0.073*** (0.000)	-0.291*** (0.000)
Fund family percentage of shares held	0.014*** (0.000)	0.050*** (0.000)
Other institutions percentage of shares held	-0.000** (0.014)	-0.000** (0.015)
Long term shareholder dummy	0.008*** (0.000)	0.032*** (0.000)
Index fund dummy	0.003 (0.330)	-0.001 (0.910)
Fund turnover rate	-0.008*** (0.000)	-0.022*** (0.000)
Buying intensity	-0.000 (0.850)	-0.000 (0.910)
Fund expense ratio	0.341 (0.200)	-1.122** (0.038)
Fund past 12 months average abnormal return	0.013*** (0.000)	0.015** (0.011)
Intercept	-0.025** (0.014)	-0.023 (0.270)
Year, fund family, proposal type dummies	Yes	Yes
Observations	13517	11174
R-squared	0.083	0.261